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Group Art Unit: 3744

### **REMARKS/ARGUMENTS**

Claims 1-12 are currently pending in the application. Claims 1-4, 6-8, and 10-12 stand rejected. Applicant wishes to thank the Examiner for the acknowledgement of allowable subject matter in dependent claims 5 and 9.

Claims 1, 5, 6, and 9 have been cancelled without prejudice. Claims 13-18 have been added.

New claim 17 is essentially claim 1 rewritten to incorporate limitations of claims 1 and 5, and new claim 18 is essentially claim 6 rewritten to incorporate limitations of claims 6 and 9. Claims 2-4 have been amended to depend from claim 17, and claims 7, 8, and 10 have been amended to depend from claim 18. Claims 2-4, 7, 8, and 10-12 have been amended to correct typographic errors, for form, for clarification, and/or to more completely define Applicants' invention, and not for reasons related to patentability.

No new matter has been added by the foregoing amendments, full support therefor being shown in the drawings and specification as filed. All claims remaining in the application are believed to now be in condition for allowance.

Reconsideration and reexamination of the application is respectfully requested in view of the referenced amendments and the following remarks.

#### **Rejection Under 35 U.S.C. §102(b)**

Claims 1, 2, 6, and 7 stand rejected as being anticipated by U.S. Patent No. 5,715,693 to van der Walt et al. The rejection is respectfully traversed.

The claimed invention is not anticipated under §102 unless each and every element of the claimed invention is found in the prior art. *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367; 231 USPQ 81 (Fed. Cir. 1986). To anticipate, a single reference must teach each and every limitation of the claimed invention. *Eolas Technologies Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1335; 73 U.S.P.Q.2D (BNA) 1782 (Fed. Cir. 2005). The identical invention must be

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shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226; 9 USPQ2d 1913 (Fed. Cir. 1989).

Claims 1 and 6 have been cancelled without prejudice. Thus, the rejection of claims 1 and 6 is moot. Claim 2 has been amended to depend from new claim 17, and claim 7 has been amended to depend from new claim 18. Claim 17 is essentially claims 1 and 5, which the Examiner has indicated is allowable, and claim 18 is essentially claims 6 and 9, which the Examiner has indicated is allowable. Thus, claims 2 and 7 are also allowable.

For the above reasons, claims 2 and 7 are allowable. Applicant requests the withdrawal of the rejection of claims 1, 2, 6, and 7, and the allowance of claims 2 and 7.

#### **Rejection Under 35 U.S.C. §103(a)**

##### **Claims 4 and 10**

Claims 4 and 10 stand rejected under 35 U.S.C. §103(a) as allegedly obvious over van der Walt '693 in view of allegedly admitted prior art. The rejection is respectfully traversed.

Claim 4 has been amended to depend from claim 17. As discussed above, claim 17 is allowable. Thus, claim 4 is also allowable. Similarly, claim 10 has been amended to depend from claim 18, which, as discussed above, is allowable. Thus claim 10 is also allowable.

For the above reasons, claims 4 and 10 are allowable. Applicant requests withdrawal of the rejection, and the allowance of claims 4 and 10.

##### **Claims 3 and 8**

Claims 3 and 8 stand rejected under 35 U.S.C. §103(a) as allegedly obvious over van der Walt '693 in view of U.S. Patent No. 4,959,974 to Kusakabe. The rejection is respectfully traversed.

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Claim 3 has been amended to depend from claim 17. Claim 8 has been amended to depend from claim 18. As discussed above, claims 17 and 18 are allowable. Thus, claims 3 and 8 are also allowable.

For the above reasons, claims 3 and 8 are allowable. Applicant requests withdrawal of the rejection, and the allowance of claims 3 and 8.

### **Claims 11 and 12**

Claims 11 and 12 stand rejected under 35 U.S.C. §103(a) as allegedly obvious over van der Walt '693 in view of U.S. Patent No. 4,633,675 to Sato. The rejection is respectfully traversed.

Van der Walt '693 discloses a refrigeration system comprising a freezer compartment and a fresh food compartment, each of the compartments having an evaporator and a sensor. The sensor senses the temperature of the compartment. *See, col.3, ln. 60-64.*

Sato '675 discloses an automotive air conditioning system comprising an evaporator 6 in an air duct 7. A temperature sensor 8 is located in the air duct upstream of the evaporator. A second temperature sensor 9 is located in the air duct downstream of the evaporator. Outputs from the temperature sensors are provide to a controller 10. The temperature sensors measure air temperature. *See, col. 3, ln. 4-16.* The temperature  $T_{air}$  from the upstream sensor 8 is subtracted from a predetermined temperature  $T1$  and compared with a predetermined change in temperature  $\Delta T$  for purposes of controlling a compressor. The temperature  $T_{ODB}$  from the downstream sensor 9 is compared to a predetermined temperature  $T4$ . The outputs from the temperature sensors are not compared to each other to determine a change in temperature across the evaporator.

The combination of van der Walt '693 and Sato '675 fails as there is no teaching or suggestion to make the combination. The standards for a finding of obviousness must be strictly adhered to. Simply citing one or more prior art references that illustrate different facets of the

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invention and then concluding that it would be obvious to combine the references to create the applicant's invention is wholly inadequate.

A claimed invention is unpatentable if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art....The ultimate determination of whether an invention would have been obvious under 35 U.S.C. §103(a) is a **legal conclusion based on underlying findings of fact.**<sup>1</sup>

A critical step in analyzing the patentability of claims pursuant to section 103(a) is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field....Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one "to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher."

Most if not all inventions arise from a combination of old elements....Thus, every element of a claimed invention may often be found in the prior art....However, **identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention....**Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, **there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant....**Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference.

The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved....In addition, the teaching, motivation or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references....The test for an implicit showing is what the combined teachings, knowledge

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<sup>1</sup> The underlying factual inquiries include (1) the scope and content of the prior art; (2) the level of ordinary skill in the prior art; and (3) the differences between the claimed invention and the prior art. *Graham v. John Deere Co.*, 383 U.S. 1, 17, 15 L. Ed. 2d 545, 86 S. Ct. 684 (1966).

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of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art....Whether the Patent Office Examiner relies on an express or an implicit showing, **the Examiner must provide particular findings related thereto....Broad conclusory statements standing alone are not "evidence."**

*In Re Werner Kotzab*, 217 F.3d 1365; 55 U.S.P.Q.2d (BNA) 1313 (Fed. Cir. 2000)(citations omitted)(emphasis added).

The Examiner has failed to identify any motivation, suggestion, or teaching of the desirability of combining van der Walt '693 with Sato '675 to arrive at Applicants' invention. There has been no statement identified in the prior art as to the desirability of the asserted combination, there has been no discussion of the knowledge of one of ordinary skill in the art or the nature of the problem to be solved, there has been no identification of what the combined teachings, the knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to one of ordinary skill in the art as required for a showing of motivation. The Examiner has failed to provide any particular findings related to any motivation, suggestion, or teaching of the desirability of combining van der Walt '693 with Sato '675. Indeed, Sato '675 could not possibly provide a motivation, suggestion, or teaching for making the combination asserted by the Examiner because Sato '675 does not teach "the use of the temperature difference across the evaporator in order to control compressor capacity," contrary to the Examiner's assertion.

In Sato '675, the temperature  $T_{air}$  from the upstream sensor 8 is subtracted from a predetermined temperature  $T_1$  and compared with a predetermined change in temperature  $\Delta T$  for purposes of controlling a compressor. The temperature TODB from the downstream sensor 9 is compared to predetermined temperatures  $T_2$ ,  $T_3$ ,  $T_4$ , or  $T_5$ , at predetermined steps in a control algorithm. The outputs  $T_{air}$ , TODB from the temperature sensors are not compared to each other to determine a change in temperature across the evaporator as called for in claims 11 and 12. The Examiner has simply relied upon "broad conclusory statements standing alone," which can

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only lead to the conclusion that the Examiner is simply relying on impermissible hindsight reconstruction of Applicants' invention.

Even if the combination of van der Walt '693 with Sato '675 were proper, the combination still would not reach Applicants' invention. Claim 11, in pertinent part, calls for a refrigerator having a pair of evaporators for cooling a pair of compartments, and sensor devices for generating refrigerator control signals, the signals being indicative of a temperature difference across each evaporator.

Neither van der Walt '693 nor Sato '675 discloses sensor devices generating signals indicative of a temperature difference across an evaporator. The sensors in Sato '675 measure air temperature on either side of an evaporator, but not the temperature difference across the evaporator. Furthermore, the outputs from the sensors in Sato '675 are not used to determine a temperature difference on either side of the evaporator. Thus, the combination of van der Walt '693 with Sato '675 would, at best, result in a refrigeration system having an evaporator with air temperature sensors on either side of the evaporator, the outputs of which are compared with predetermined temperature values, but not with each other.

For these reasons, claim 11 is patentable over van der Walt '693 in view of Sato '675. Since claim 12 depends from claim 11, it is for the same reasons patentable over van der Walt '693 in view of Sato '675. Applicant requests the withdrawal of the rejection, and the allowance of claims 11 and 12.

Claims 13 and 14 are in essence claims 11 and 12 rewritten to depend from claim 17. Claims 15 and 16 are in essence claims 11 and 12 rewritten to depend from claim 18. Because, as discussed above, claims 17 and 18 are allowable, claims 13-16 are also allowable.

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It is respectfully submitted that all of the claims in the application are allowable over the prior art of record. Prompt notification of allowability is respectfully requested.

Respectfully submitted,

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